

U.S.S.N. 10/027,248
Attorney Docket No.: BAI-007CPACN

Examiner: S. Tran
Group Art Unit: 1615

REMARKS

Claims 1-8 were pending. Claims 3 and 8 have been amended. Therefore, claims 1-8 will be pending upon entry of the instant amendment.

The amendments made to the claims are not related to any issues of patentability. In particular, claim 3 was amended to correct a grammatical error, and claim 8 was amended to correct typographical errors. No new matter has been added.

Amendment of the claims should in no way be construed as an acquiescence to any of the Examiner's objections and/or rejections, and was done solely to expedite prosecution of the above-identified application. Applicants reserve the option to further prosecute the same or similar claims in this or one more other patent applications.

Applicants note with appreciation that claim 3 was found to be free of the prior art.

Claim Objection

Claim 8 was objected to because of a punctuation error. Applicants respectfully submit that this rejection no longer pertains to claim 8 as currently amended.

Rejection of Claims 1-8 under Judicially Created Doctrine of Obviousness-Type Double Patenting

Claims 1-8 were rejected under the judicially created doctrine of obviousness type double patenting over claims 1-34 of U.S. Patent No. 6,348,216. The Office Action indicates that a timely filed terminal disclaimer in compliance with 37 C.F.R. § 1.312 (c) may be used to overcome a provisional rejection based on a non-statutory double patenting ground provided the conflicting application is shown to be commonly owned with this application. Applicants will address the double patenting issue upon a finding of subject matter in the instant application that is allowable but for the double patenting rejection.

Rejection of Claims 2 and 4-7 under 35 U.S.C. § 112, second paragraph

Claims 2 and 4-7 are rejected under 35 U.S.C. § 112, second paragraph, "as being indefinite for failing to particularly point out and distinctly claim the subject matter which [A]pplicant[s] regard[] as the invention." Applicants respectfully traverse this rejection.

U.S.S.N. 10/027,248
Attorney Docket No. BAI-007CPACN

Examiner: S. Tran
Group Art Unit: 1615

In particular, the Examiner alleges that claim 2 is indefinite "in the use of the phrase 'extra granule material.' It is unclear what can be included in the 'extra granule material,' as well as the difference between the 'granule' and the 'extra granule.'" The Examiner also found in claim 4 the language to be "unclear regarding...the relationship between the granule and the extra granule material."

Applicants submit that the term "extra granule material" is not vague, and would be readily understood by one of ordinary skill in the art. The term "extra" is defined as "outside, outside the scope or region of, beyond," in the *Webster's New World Dictionary* (Prentice Hall: New York, 1991), p. 481. One of ordinary skill in the art would readily understand that the term "extra granule material" refers to the material not incorporated into the granule. Examples of materials that may be used as extra granule material include "a second glidant, a second disintegrant, a filler and starch," as described on page 8, lines 6-7 of the instant specification.

Applicants submit that based on the meaning of the term as ordinarily and customarily understood in the art and the teachings of the instant specification, one of ordinary skill in the art would be able to determine which materials are encompassed by the claims. Therefore, the term "extra granule material" as recited in the instant claims meets the definiteness requirement of 35 U.S.C. § 112, second paragraph.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 2 and 4-7 under 35 U.S.C. § 112, second paragraph.

Rejection of Claims 1 and 2 under 35 U.S.C. § 102 (b)

Claims 1 and 2 are rejected under 35 U.S.C. § 102 (b) as being anticipated by U.S. Patent No. 4,980,375 ("Sunshine *et al.*"). According to the Examiner, Sunshine *et al.* "teaches [a] composition comprising [a] mixture of [f] ibuprofen and narcotic analgesic (columns 7-8)." Applicants respectfully traverse this rejection.

Claim 1 is directed to a pharmaceutical composition comprising a granule comprised of ibuprofen and a narcotic analgesic in a single phase. Claim 2 depends from claim 1 and therefore contains each of the limitations of claim 1.

Sunshine *et al.* describe the administration of an antipyretically effective amount of the S(+) ibuprofen enantiomer. Sunshine *et al.* do not teach or suggest pharmaceutical compositions comprising a granule, much less a granule comprised of ibuprofen and a narcotic analgesic in a single phase, as claimed by Applicants. Therefore, because the cited reference does not teach each and every element of the claims at issue, Applicants

U.S.S.N. 10/027,248
Attorney Docket No.: BAI-007CPACN

Examiner: S. Tran
Group Art Unit: 1615

respectfully request that this rejection of the claims 1 and 2 under 35 U.S.C. § 102 (b) be withdrawn.

Rejection of Claims 1 and 2 under 35 U.S.C. § 102 (b)

Claims 1 and 2 are rejected under 35 U.S.C. § 102 (b) as being anticipated by U.S. Patent No. 4,587,252 ("Arnold"). Applicants respectfully traverse this rejection.

As described above, claims 1 and 2 are directed to a pharmaceutical composition comprising a granule comprised of ibuprofen and a narcotic analgesic in a single phase.

Arnold describes pharmaceutical compositions containing hydrocodone and ibuprofen. In the examples, Arnold describes the formation of tablets without prior formulation of a granule, contrary to the teachings of Applicants. Applicants submit that Arnold does not teach or suggest pharmaceutical compositions comprised of a granule, as claimed by Applicants. Furthermore, the examples of Arnold teach away from the present invention.

Therefore, because the cited reference does not teach each and every element of the claims at issue, Applicants respectfully request that this rejection of claims 1 and 2 under 35 U.S.C. § 102 (b) be withdrawn.

Rejection of Claims 1 and 2 under 35 U.S.C. § 103 (a)

Claims 1 and 2 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Sunshine *et al.* and Arnold, as described above. According to the Examiner, "it would have been obvious for one of ordinary skill in the art to combine the teachings of Sunshine [*et al.*] in view of Arnold with the expectation of at least a similar result to the claimed invention, because the references teach the advantageous results in the use of ibuprofen and narcotic analgesic in a single mixture/phase." Applicants respectfully traverse this rejection of the claims.

In order to establish a *prima facie* showing of obviousness based on a combination of references, the Examiner must show some reason, suggestion, or motivation found in the references whereby a person of ordinary skill would make the combination. *See In re Oenker*, 977 F.2d 1443, 1447 (Fed. Cir. 1992). A proper analysis under 35 U.S.C. § 103 requires, *inter alia*, consideration of two factors: (1) whether the cited references would have suggested to those of ordinary skill in the art that they should make the claimed composition or device, or carry out the claimed process; and (2) whether the cited references would also have revealed that in so making or carrying out, those of ordinary skill would have a reasonable expectation of success. *See In re Dow Chemical Co.*, 837 F.2d 469, 473, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988). Both the

U.S.S.N. 10/027,248
Attorney Docket No.: BAI-007CPACN

Examiner: S. Tran
Group Art Unit: 1615

suggestion and the reasonable expectation of success must be founded in the cited references, not in the applicant's disclosure. *Id.*

Turning now to the specific rejection, claims 1 and 2 are directed to a pharmaceutical composition comprising a granule comprised of ibuprofen and a narcotic analgesic in a single phase.

Sunshine *et al.* fail to teach or suggest the pharmaceutical compositions comprising a granule comprised of ibuprofen and a narcotic analgesic in a single phase. Arnold does not overcome this deficiency of Sunshine *et al.*

Although Arnold describes pharmaceutical compositions containing hydrocodone and ibuprofen, Arnold describes the formation of tablets *without prior formulation of a granule*, in contrast to the invention claimed by Applicants. Applicants submit that Arnold also fails to teach or suggest pharmaceutical compositions comprising a granule comprised of ibuprofen and a narcotic analgesic in a single phase, as claimed. Also, by describing the formation of tablets *without prior formulation of a granule*, the examples of Arnold teach away from the present invention.

In view of this teaching away by Arnold, one of ordinary skill in the art would not be motivated to combine Arnold and Sunshine *et al.* Moreover, assuming for the sake of argument that one of ordinary skill in the art were motivated to combine the references, the combination would not put the artisan in possession of the invention; *i.e.*, the combination does not provide each and every element of the instant invention as claimed.

Sunshine *et al.* and Arnold, taken alone or in combination, fail to teach or suggest the claimed invention. Therefore, Applicants respectfully request that this rejection of claims 1 and 2 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

Rejection of Claims 4-8 under 35 U.S.C. § 103(a)

Claims 4-8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 4,844,907 to Elger *et al.* ("Elger *et al.*"). Applicants respectfully disagree and traverse the rejection.

Claim 4 is directed to a pharmaceutical tablet composition comprising an effective amount of ibuprofen; an effective amount of a narcotic analgesic; colloidal silicon dioxide wherein the weight of the colloidal silicon dioxide is provided in a range, of the total weight of the tablet, of about 0.5% to about 3%; a filler selected from the group consisting of microcrystalline cellulose and powdered cellulose; a disintegrant selected from the group consisting of croscarmellose sodium, crospovidone, and sodium starch glycolate; a binder consisting of an alkylhydroxy methylcellulose wherein the weight of the binder is provided in a range, of the total weight of the tablet composition,

U.S.S.N. 10/027,248
Attorney Docket No. BAI-007CPACN

Examiner: S. Tran
Group Art Unit 1615

of about 2% to less than 6%; a starch provided in a weight range, of total weight of the tablet composition, of about 11% to about 28%; and a lubricant wherein the lubricant is provided in an amount less than 1% by weight of the total weight of the tablet, wherein the tablet comprises a compressed blend of a granule and extra granule material wherein the granule comprises at least a portion of the ibuprofen, at least a portion of the narcotic analgesic, a portion of the colloidal silicon dioxide, a portion of the disintegrant, and a portion of the starch and the weight of the extra granule material is provided in a range of up to about 25% of the weight of the whole tablet. Claims 5-7 are dependent claims of claim 4 and contain all of its limitations.

Claim 8 is directed to a pharmaceutical tablet composition comprising an effective amount of ibuprofen wherein the weight of the ibuprofen is provided in a range, of the total weight of the tablet composition, of up to about 50%; an effective amount of hydrocodone; colloidal silicon dioxide provided in a range, by total weight of the tablet composition, of about 1.5% to about 2%; microcrystalline cellulose provided in a range, of the total weight of the tablet composition, of about 15% to about 25%; a disintegrant selected from the group consisting of croscarmellose sodium and crospovidone wherein the weight of the disintegrant is provided in a range, of the total weight of the tablet composition, of about 6 to about 8%; a binder consisting of an alkylhydroxy methylcellulose wherein the weight of the binder is provided in a range, of the total weight of the tablet composition, of about 3 % to about 4 %; corn starch wherein the weight of the corn starch is provided in a range, of the total weight of the tablet composition, of about 11 to about 17 %; and a lubricant wherein the weight of the lubricant is provided in an amount less than 1% by weight of the total weight of the tablet.

Elger *et al.* describe multiphase pharmaceutical compositions that contain ibuprofen and codeine. Elger *et al.* do not teach or suggest a composition with ibuprofen and a narcotic analgesic in a single phase, comprised of a granule and extra granule material as required by claims 4-7.

Applicants respectfully disagree that claims 4-7 would be obvious in view of the teachings of Elger *et al.* In the "Comparative Example," Elger *et al.* describe an unsuccessful composition of tablets comprising ibuprofen, codeine phosphate, microcrystalline cellulose, croscarmellose sodium, hydroxypropylmethyl cellulose, and magnesium stearate. The tablets were manufactured using a wet granulation process and the ibuprofen and the codeine phosphate were in a single-phase dosage. However, Elger *et al.* state that these tablets had "poor disintegration times, poor crushing strengths, and exhibited sticking problems" (col. 6, lines 8-10). In contrast to Applicants' invention,

U.S.S.N. 10/027,248
Attorney Docket No : BAI-007CPACN

Examiner: S. Tran
Group Art Unit: 1615

Elger *et al.* teach the use of **multiphase tablets** to overcome the tableting problems seen in the single-phase tablets (See Examples 1-6, col. 7-9). Furthermore, the Elger *et al.* compositions do not comprise extra-granule material or colloidal silicon dioxide.

Elger *et al.* teach away from the present invention by showing that **multiphase formulations** of narcotic analgesics and ibuprofen are necessary in order to avoid undesirable qualities. It logically follows that the Comparative Example of Elger *et al.* would not lead one of ordinary skill in the art to have any expectation of success in practicing the claimed invention. In contrast, Applicants have made the surprising discovery that these undesirable characteristics can be overcome with the single-phase compositions of claims 4-7.

Elger *et al.* do not teach or suggest the use of colloidal silicon dioxide. Claim 8 requires that the composition comprise "colloidal silicon dioxide provided in a range, by total weight of the tablet composition, of about 1.5% to about 2%." Elger *et al.* teaches away from the use of colloidal silicon dioxide by not using it in the formulations described therein. There is nothing in Elger *et al.* that would motivate one of ordinary skill in the art to go contrary to the teachings of the reference and use colloidal silicon dioxide. Consequently, it would not have been obvious for an ordinarily skilled artisan to obtain the pharmaceutical tablet composition claimed in view of Elger *et al.*, because Elger *et al.* neither teaches nor suggests the use of colloidal silicon dioxide.

Therefore, Applicants respectfully request reconsideration and withdrawal the rejection of claims 4-8 under 35 U.S.C. § 103 (a).

Rejection of Claims 4-8 under 35 U.S.C. § 103 (a)

Claims 4-8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Elger *et al.* and Sunshine *et al.* According to the Examiner, "the references teach the advantageous results in the use of ibuprofen and narcotic analgesic. The expected result would be compressed tablet of ibuprofen and narcotic analgesic having good stability, disintegration times, and dissolution rates." Applicants respectfully traverse this rejection.

Claims 4-8 have been described above.

Elger *et al.* describe multiphase pharmaceutical compositions that contain ibuprofen and codeine. Elger *et al.* do not teach or suggest a composition with ibuprofen and a narcotic analgesic in a single phase, comprised of a granule and extra granule material as required by claims 4-7.

Sunshine *et al.* describe the administration of an antipyretically effective amount of the S(+) ibuprofen enantiomer.

U.S.S.N. 10/027,248
Attorney Docket No.: BAI-007CPACN

Examiner: S. Tran
Group Art Unit: 1615

Applicants respectfully disagree that claims 4-7 would be obvious in view of the combined teachings of Elger *et al.* and Sunshine *et al.* As described above, in their Comparative Example, Elger *et al.* discuss an unsuccessful composition of tablets comprising ibuprofen, codeine phosphate, microcrystalline cellulose, croscarmellose sodium, hydroxypropylmethyl cellulose, and magnesium stearate. The tablets were manufactured using a wet granulation process and the ibuprofen and the codeine phosphate were in a single-phase dosage. However, in contrast to the Examiner's assertion, Elger *et al.* state that these tablets had "poor disintegration times, poor crushing strengths, and exhibited sticking problems" (col. 6, lines 8-10). Elger *et al.* teach the use of *multiphase tablets* to overcome the tableting problems seen in the single-phase tablets (See Examples 1-6, col. 7-9). Furthermore, the Elger *et al.* compositions do not comprise extra-granule material or colloidal silicon dioxide as required by the claims.

Thus, as described above, Elger *et al.* teach away from the present invention by showing that tablets with a narcotic analgesic and ibuprofen in a single phase exhibit distinctly undesirable qualities and characteristics. In view of this clear and unmistakable teaching away from Applicants' claimed invention, there is nothing in Elger *et al.* that would motivate one of ordinary skill in the art use wet granulation to manufacture tablets containing a narcotic analgesic and ibuprofen in a single phase. In other words, there is nothing in Elger *et al.* that suggests to those of ordinary skill in the art that they should make the Applicants' claimed composition. Moreover, assuming, *arguendo*, that one of ordinary skill in the art would be motivated to make the claimed composition, one of ordinary skill in the art would have no reasonable expectation of success based on the teachings (Comparative Example) of Elger *et al.*

Although Sunshine *et al.* teach that ibuprofen may be combined with ibuprofen, it does not overcome the deficiencies of the Elger *et al.* reference. Sunshine *et al.* also fail to teach compositions comprising a narcotic analgesic and ibuprofen in a single-phase composition, and comprising granule material.

Applicants assert that claims 4-7 are unobvious over Elger *et al.* in combination with Sunshine *et al.*, because neither reference teaches nor suggests compositions with a narcotic analgesic and ibuprofen in a single phase comprising a granule. There is nothing in either reference that provides the requisite motivation to combine the references in the manner suggested in the Office Action. Given the clear teaching away from the invention of Elger *et al.*, one of ordinary skill in the art would not be motivated to combine the references. Even if such motivation to combine these references were supplied by either reference, there still is nothing in either reference that provides one of ordinary skill in the art with the motivation to modify the teachings of the references to

U.S.S.N. 10/027,248
Attorney Docket No.: BAI-007CPACN

Examiner: S. Tran
Group Art Unit: 1615

make Applicants' claimed invention, or with a reasonable expectation of success. This is especially true based on the teachings (Comparative Example) of Elger *et al.* Any position to the contrary would constitute an impermissible hindsight reconstruction of Applicants' invention. Therefore, Applicants respectfully request reconsideration and withdrawal the rejection of claims 4-7 under 35 U.S.C. § 103 (a).

Applicants submit that claim 8 is unobvious over Elger *et al.* in combination with Sunshine *et al.* because neither reference teaches nor suggests compositions with the particular percentages of materials as claimed. As described above, Elger *et al.* fail to teach or suggest compositions comprising colloidal silicon dioxide as claimed in claim 8. Although Sunshine *et al.* mention colloidal silicon dioxide as a potential ingredient, they do not teach or suggest the particular percentages claimed in claim 8. Moreover, there is nothing in either reference that would motivate one of ordinary skill in the art to combine the teachings of the references, especially in view of the teaching away from the invention by Elger *et al.* and the lack of expectation of success of Elger *et al.*

Therefore, Applicants respectfully request that these rejections of claims 4-8 under 35 U.S.C. § 103 (a) be withdrawn.

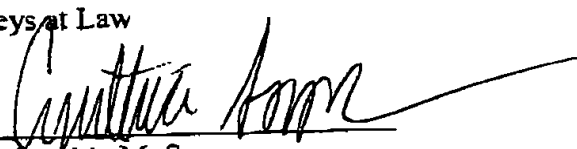
SUMMARY

In view of the foregoing, entry of the amendments and remarks presented herein, favorable reconsideration and withdrawal of the rejections, and allowance of this application with all pending claims are respectfully requested. If a telephone conversation with Applicants' Attorney would expedite prosecution of the above-identified application, the Examiner is invited to call Peter C. Lauro, Esq. at (617) 227-7400.

Date: March 24, 2003

LAHIVE & COCKFIELD, LLP
Attorneys at Law

By


Cynthia M. Soroos
Reg. No. 53,623 for
Peter C. Lauro, Esq.
Reg. No. 32,360
28 State Street
Boston, MA 02109
(617) 227-7400
(617) 742-4214

U.S.S.N. 10/027,248

Attorney Docket No.: BAI-007CPACN

Examiner. S. Tran
Group Art Unit: 1615**VERSION OF THE CLAIMS WITH MARKINGS TO SHOW CHANGES MADE**

3. [Amended] A tablet compositions comprising the compressed composition of claim 1.
8. [Amended] A pharmaceutical tablet composition comprising:
- (a) an effective amount of ibuprofen wherein the weight of the ibuprofen is provided in a range, of the total weight of the tablet composition, of up to about 50%;
 - (b) an effective amount of hydrocodone;
 - (c) colloidal silicon dioxide provided in a range, by total weight of the tablet composition, of about 1.5% to about 2%;
 - (d) microcrystalline cellulose provided in a range, of the total weight of the tablet composition, of about 15% to about 25%;
 - (e) a disintegrant selected from the group consisting of croscarmellose sodium and crospovidone wherein the weight of the disintegrant is provided in a range, of the total weight of the tablet composition, of about 6 to about 8%;
 - (f) a binder consisting of an alkylhydroxy methylcellulose wherein the weight of the binder is provided in a range, of the total weight of the tablet composition, of about 3 % to about 4 %;
 - (g) corn starch wherein the weight of the corn starch is provided in a range, of the total weight of the tablet composition, of about 11 to about 17 %; and
 - (h) a lubricant wherein the weight of the lubricant is provided in an amount less than 1% by weight of the total weight of the tablet;